

MPR-47SE
Network Analyzer with Ethernet Communication

MPR-4 series panel type network analyzers, which allow for detailed measurement and analysis of electrical parameters, are compact solutions with **96 x 96 x 45 mm** dimensions.

They offer **a wide range of I/O solutions with their replaceable modular structure** depending on requirements and areas of use. Therefore, they provide flexible detection and control of the devices in the field.

Thanks to **Ethernet feature**, MPR-47SE allows to connect to the local network without the need of a gateway via Modbus TCP protocol.

With battery compartment that allows batteries to be changed, the user can change batteries easily and fast.

- Detailed measurement up to 51st harmonics
- Current & Voltage unbalance measurement
- Sag & Swell measurement
- RS-485 Modbus RTU communication
- Ethernet Modbus TCP communication
- 16 MB memory
- Event and Log recording
- IP51 protection class (optional IP54)

SPECIFICATIONS

	MPR-47SE
ENCLOSURE	
Dimensions	96x96x45
Protection Class	Terminal: IP20, Front: IP51 (optional IP54)
Display	3,5" LCD display
MEASUREMENT	
Voltage	
Measurement Range	5-300 VAC (L-N), 5-480 VAC (L-L)
Measurement Range with Voltage Transformer	5 V - 999,9 kV
Neutral - Ground Voltage (PE-N)	2-300 VAC
Accuracy	0.5% ± 1 Digit (for MPR-47SE-0,5 0,2% ± 1 Digit)
Input Impedance	> 1 MΩ
Burden	< 0,5 VA
Current	
Nominal Current	In: 5A / 1A
Minimum Current	5 mA
Measurement Range	50 mA - 5,5 A
Measurement Range with Current Transformer	50 mA - 10.000 A
Accuracy	0.5% ± 1 Digit (for MPR-47SE-0,5 0,2% ± 1 Digit)
Burden	0,5 VA
Overload Current	1,2 x In
Short Time Overload (1 sec)	10 x In
Power / Energy	
Active Power	0-1 GW; 1% ± 1 Digit (for MPR-47SE-0,5 0,5% ± 1 Digit)
Reactive Power	0-1 GVAr; 2% ± 1 Digit (for MPR-47SE-0,5 1% ± 1 Digit)
Apparent Power	0-1 GVA; 1% ± 1 Digit
Power Factor	± 1.00 Accuracy ± 0,02(for MPR-47SE-0,5 ± 0,01)
Active Energy	0 - 99 999 999 kWh or MWh; Accuracy 1% (Class 1) (for MPR-47SE-0,5 Class 0,5)
Reactive Energy	0 - 99 999 999 kVArh or MVArh; Accuracy 2% (Class 2) (for MPR-47SE-0,5 Class 1)
Apparent Energy	0 - 99 999 999 kVAh or MVAh; Accuracy 1%
Power Quality	
Total Harmonic Distortion	L - L Voltage (THD-U%); L - N Voltage (THD-V%); Current (THD-I%)
Individual Harmonics	2-51 Voltage (V) and Current (I)
Voltage and Current Unbalances	●
Sag&Swell	●
SUPPLY	
Operating Voltage	50-270 VAC/DC (50/60 Hz)
Power Consumption	< 5 VA (< 10 VA with module)
COMMUNICATION	
RS-485 Modbus RTU	●
Ethernet Modbus TCP	●
INPUTS and OUTPUTS (with MODULE)	
Digital Input	
Pulse Width	40 - 500 ms
Digital Output	
Energy Pulse Output	Active energy (1 kWh/pulse - 50 MWh/pulse) Reactive energy (1 kVArh/pulse - 50 MVArh/pulse)
Pulse Width / Duty	10 - 1000 ms
Switching Current	Max 50 mA
Switching Voltage	5 - 24 VDC, max 30 VDC
Relay Output	
Relay Output	2 NO, 250 VAC / 5 A
Analog Output	
Current Output	0 - 20 mA, 4 - 20 mA, 0 - 24 mA
Voltage Output	0 - 5 V, 0 - 10 V, ± 5 V,± 10 V
Accuracy	0.5%
CONNECTIONS	
Mounting Type	Flush mouinting
Connection Terminals	Screw terminal with socket
Connection Types	3P4W, 3P3W, 3 Phase Aron, 3P4W (balanced),3P3W(balanced)
AMBIENT CONDITIONS	
Ambient Temperature	-10 / + 70°C
Storage Temperature	-20 / + 80°C
Overvoltage Category	III
Pollution Degree	II
Maximum Ambient Humidity	90%
STANDARDS	
Standards	EN 61557-12, EN 61326-1, EN 61000-6-2, EN 61000-6-4, EN 62053, EN 60068, EN 61010